SVSD Three-Year
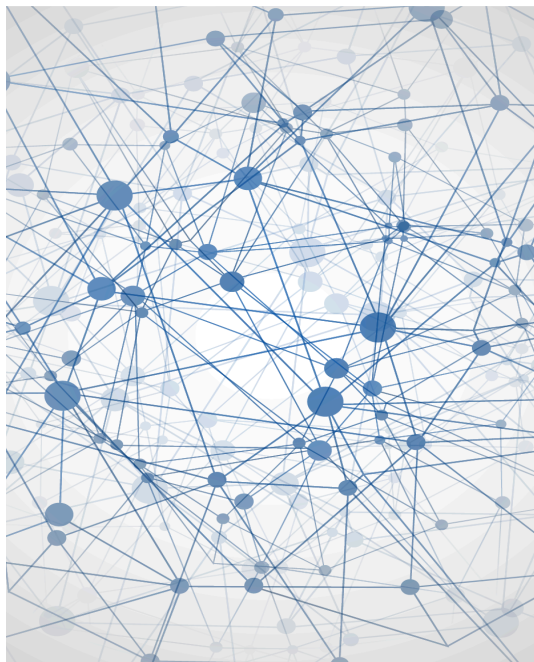# ICT Plan

RATIONALE

In 2005 Manitoba Education introduced the "Literacy with ICT Across the Curriculum" model for all K–12 schools. A continuum was introduced that all teachers used to infuse ICT into every subject area. The Swan Valley School Division has been following that model and is ready to build on it and continue improving instruction for students. Technology is constantly evolving and becoming more and more important in our lives.

Sometimes an assumption is made that students born into our heavily infused ICT world naturally can do it all. We notice that this often can seem to be true if you watch students use ICT for their personal use, but looks can be deceiving. Most ICT skills don't just happen, and the current provincial model of infusion into every class can be difficult for teachers that are very busy delivering other important curriculum content or that may not feel confident in their ICT skills.

This plan is designed to identify skills and goals for each grade level for all teachers to infuse into all subject areas. It is also a priority for SVSD students to receive direct instruction designed to teach both digital citizenship and other ICT skills. Having an ICT teacher with a scheduled ICT class, in addition to infusing ICT into every class, will further prioritize ICT.

Table of Contents

THREE YEAR IMPLEMENTATION

Year One
**2023–2024
School Year**

- All teachers infuse ICT skills into all subjects
- **new** Grade 6-8 ICT teachers deliver 2 periods of ICT instruction per 6-day cycle

Year Two
**2024–2025
School Year**

- All teachers infuse ICT skills into all subjects
- **new** Grade 3-5 ICT teachers deliver 1-2 periods of ICT instruction per 6-day cycle
- Grade 6-8 ICT teachers deliver 2 periods of ICT instruction per 6-day cycle

Year Three
**2025–2026
School Year**

- All teachers infuse ICT skills into all subjects
- **new** K-2 ICT teachers deliver 1 periods of ICT instruction per 6-day cycle
- Grade 3-5 ICT teachers deliver 1-2 periods of ICT instruction per 6-day cycle
- Grade 6-8 ICT teachers deliver 2 periods of ICT instruction per 6-day cycle

Grades K–2
By END of Grade 2

ICT SKILLS

Student Skills and Abilities

- Username and password
- Using a mouse
    - right click vs left click
    - dragging mouse
    - hovering
    - moving objects/icons
    - single vs double clicking
    - introduction of the triple click
    - Using a touchpad (right-clicking, dragging, moving objects/icons, 2 finger functions)
- Typing
    - Using the alphabet (not necessarily with home row)
    - How to create a capital letter (with Shift vs caps lock)
    - How to find numbers and symbols
- Printing Documents
- Paint
- Microsoft Word/ Google Docs - Use templates to plan, write, edit, and illustrate stories
- Microsoft PowerPoint/ Google Slides - Design an All About Me slideshow given a template. Outline personal information, accomplishments, goals, and interests in a mini biography.
- Intro to Coding - develop the foundational skills (observational, concentration, problem solving and logic) through activities that are unplugged moving towards actual coding activities.

Student Digital Health and Safety
Common Sense Digital Citizenship Lessons

Grades K-2
- Meet Arms of the Digital Citizens
- Meet Guts of the Digital Citizens
- Meet Feet of the Digital Citizens
- Meet Heart of the Digital Citizens
- Meet Legs of the Digital Citizens
- Meet Head of the Digital Citizens

Grade K
- Media Balance is Important
- Pause for People
- Safety in My Online Neighborhood

Grade 1
- Pause and Think Online
- How Technology Makes You Feel
- Internet Traffic Light

Grade 2
- We The Digital Citizens
- Device-Free Moments
- That's Private
- Digital Trails
- Who is Online in Your Community?
- Putting a Stop to Online Meanness
- Let's Give Credit

Grades 3-5
By END of Grade 5

ICT SKILLS

Student Skills and Abilities

- Proper way to hold/sit with a laptop
  - Feet on the floor
  - Sitting up straight
  - On a flat surface
  - Screen open to 90 degrees
- Start button
  - Finding programs
  - Opening documents folder and settings
  - Shutting down and restarting the computer
- Typing (www.typing.com) - home row
- Understanding other functions of the keyboard (i.e., backspace vs delete, windows, tab, number, function key, holding the shift key and pressing numbers)
- Continue working with word processors (Microsoft Word/Google Docs)
  - Basic functions like writing a poem and typing up written work
  - Center/left/right text
  - Changing font and text size (what is appropriate)
  - Visual effects like bold, underline, italics, color, highlight
- File management
  - Where do files go? (when you download, when you save)
  - Difference between autosaves and manual saves
  - Accessing autosaved files
  - Accessing Cloud-based files (Microsoft Onedrive/Google Drive)
  - Searching folders
  - Making folders
  - Organizing files and folders
  - Finding misplaced/disorganized files
  - Transferring files via USB

Student Skills and Abilities continued

- ○ Good file names
    - ■ Names that are meaningful later
    - ■ Avoid names like document1 or the student's name
- ○ Learning basic file types (doc, docx, pdf, jpg, txt, html, ppt, pptx, wma, mp3, mov, png, gif, zip, etc.)
- ○ Opening different file types (which programs can open a doc, docx, pdf, jpg, txt, html, ppt, pptx, wma, mp3, mov, png, gif, zip, etc.)
- Keyboard shortcuts
    - ○ Basic keyboard shortcuts (i.e., Ctrl + C, X, V, B, U, I, etc.)
- Math & English Programs:
    - ○ Reflex, mathletics, reading eggs, math seeds, Prodigy
- Email management
    - ○ How to create an email
    - ○ Adding multiple recipients
    - ○ What the following functions are for:
        - ■ To, Cc, Bcc, Subject, message box, attachments
        - ■ Reply vs reply all, forwarding, deleting
- Coding
- Share work and work collaboratively through a shared online space
- Give constructive comments on others' work online
- 3D Printing
    - ○ Students will learn basic 3D printing concepts
        - ■ Polar Cloud, Flashprint, Tinkercad, Learn by Layers

Student Digital Health and Safety
Common Sense Digital Citizenship Lessons

Grade 3
- Your Rings of Responsibility
- Password Power-Up
- This is Me
- Our Digital Citizenship Pledge
- The Power of Words
- Is Seeing Believing?

Grade 4
- My Media Choices
- Private and Personal Information
- Our Online Tracks
- Keeping Games Fun and Friendly
- Be a Super Digital Citizen
- A Creator's Rights and Responsibilities

Grade 5
- Finding My Media Balance
- You Won't Believe This!
- Beyond Gender Stereotypes
- Digital Friendships
- Is it Cyberbullying?
- Reading News Online

Grades 6-8
By END of Grade 8

Student Skills and Abilities

- Keyboard
  - More Advance hotkeys (i.e., Ctrl + P, S, E, R, L, O, T, N, Ctrl+Alt+Del, etc.)
    - As well as using these in practice (not just theory)
- Printing
  - Finding printers, selecting printer, printer options (i.e., two-sided), page size (i.e., 8.5x11 vs 8.5x14), landscape/portrait orientation, other advanced options
  - Printing multiple pages to a single physical page (i.e., 4 pages on one, etc.)
- Microsoft Office/Google Applications
  - Microsoft Word/Google Docs
    - Page orientation (landscape vs portrait orientation)
    - Create blank docs vs using templates; benefits and drawbacks (i.e., templates create boxes for you to type; templates are rigid and don't allow for much creativity and advanced design)
    - Inserting images
      - From a saved file
      - Copying and pasting
    - Moving images around freely (i.e., using "Wrap Text" feature to move images around without affecting the text underneath)
    - Design features (image/texture/color backgrounds)
    - Insert features (hyperlinks, images, shapes, headers, footers)
    - WordArt
    - Manipulation of shapes (tools like *shape fill*, *shape outline*, etc.)
    - Manipulation of text (i.e., bold, underline, italics, highlight, font color, glow, and other text effects, font size)
    - Adding bullets, changing bullets, bullet levels
    - Create a table and manipulate rows and columns

Student Skills and Abilities continued

- Microsoft Excel/Google Sheets
    - Adding numbers to cells
    - How to quickly maneuver to different cells (using directional keys)
    - Using the _functions_ button to do quick calculations of input data (i.e., adding a row on numbers using the SUM function)
    - Creating a visual representation of data (i.e., graph)
- Microsoft Publisher/Google Drawings
    - Manipulation of images
        - Creating _transparent backgrounds_ using _clipart_
        - Changing tint/color of images inside the _Shape Format/Image Format_ tool
        - Using _Wrap Text_ function to freely move images
        - Manipulating the order of images from front to back inside the _Shape Format/Image Format_ tool
        - Inside the _Shape Format/Image Format_ tool - cropping, creating borders and picture effects
    - Text
        - Creating _text boxes_ and manipulating these to: have a border, text color, background, color, text fill vs text border, text effects (i.e., shadow and glow)
        - Using _WordArt_ to create text with shape (i.e., curved)
        - Rotating text box/using _text direction_
- Microsoft Powerpoint/Google Slides
    - Animations
        - Animating text boxes/paragraphs to enter screen with click
    - Transitions
        - Creating transitions between slides
        - How to remove slide auto advance
        - Using images with embedded hyperlinks as a slide transition
- Microsoft Paint/Google Drawings
    - How to use tools (i.e., line, paint bucket, brush, shapes) to create a simple image
    - Saving (i.e., saving images as a png, jpg, or jpeg)

Student Skills and Abilities continued

- Screen capture
  - Still images using Window's _Snipping_ tool
    - Copying these images to other programs
    - Using rectangle vs free form tool
    - Using print screen button on keyboard
  - Screen video capture using online applications like _Screencastomatic_ and _Screencastify_
- Video editing
  - Downloading videos online from sites like pixabay (as an mp4)
  - Using sites like Kapwing to create videos (i.e., for an ad)
  - Exporting and downloading these files
- 3D printing/design/CAD vs CAM
  - Using the _FlashForge/Learn by Layers curriculum_
  - Understanding importance, functions, usage, and parts of 3D printing
  - Understanding the difference between CAD and CAM
  - Creating designs for 3D models
  - Using 3D design technology to manipulate shapes and text

Student Digital Health and Safety
Common Sense Digital Citizenship Lessons

Grade 6
- Finding Balance in a Digital World
- Don't Feed the Phish
- Who Are You Online?
- Chatting Safely Online
- Digital Drama Unplugged
- Finding Credible News

Grade 7
- My Media Use: A Personal Challenge
- Big, Big Data
- The Power of Digital Footprints
- My Social Media Life
- Upstanders and Allies: Taking Action Against Cyberbullying
- The Four Factors of Fair Use

Grade 8
- Digital Media and Your Brain
- Being Aware of What You Share
- Social Media and Digital Footprints: Our Responsibilities
- Sexting and Relationships
- Responding to Online Hate Speech
- This Just In!

Grades 9-12
By END of Grade 12

ICT SKILLS

Plans to improve ICT skills and digital citizenship for grades 9 to 12 are still in development.

TEACHING RESOURCES

- Common Sense Education Digital Citizenship Curriculum
- TechnoKids K-12 Technology Projects
- Flash Forge 3-D Printing Curriculum
- www.typing.com

PROFESSIONAL DEVELOPMENT

- Training will be offered for ICT school leaders to build their skills and knowledge as ICT instructors.
- ICT school leaders will work together to plan support and training for teachers in their schools.
- Explore Artificial Intelligence (AI) and learn about best practices for students and teachers to enhance learning, increase efficiency and mitigate negative aspects like bias, cheating, plagiarism, and other possible concerns.

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